

REMARKS

Claims 1-28 and 30 are now pending in this application. By this response to the non-final Office Action dated June 8, 2006, claims 1, 5-6, 11, 17, 18, 22-23, 25, 28, and 30 are amended, and claim 29 is cancelled. The dependencies for claims 17 and 25 have been amended, and claims 5 and 22 have been amended to modify the wording in minor respects. Care has been taken to avoid the introduction of new matter. Favorable reconsideration of the application in light of the following comments is respectfully solicited.

I. Claim Objections

In section 4 of the Office Action, claims 6, 17, and 30 are objected to for cited informalities. Claims 6, 17, and 30 have been amended as suggested by the Office Action, as well as claim 23, which contains the same language objected to in claims 6 and 30.

II. Rejections Under 35 U.S.C. § 103(a)

A. Independent Claims 1, 11, and 18

In section 6 of the Office Action, claims 1, 11-13, and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 4,687,944 (hereinafter “Mitsuka”) in view of U.S. Pat No. 6,700,679 (hereinafter “Fujita”). Applicant respectfully traverses the rejection.

In order to more clearly distinguish the claims from the cited references, Applicant has amended claims 1, 11, and 18 to recite “shifting writing timing in said main scan direction by changing a cycle of a writing clock” (*see* p. 20, lines 15-16 of the present application). As disclosed in the present application, “modification in the main scan direction . . . by controlling the writing clock . . . allows reduction of amounts of computation as compared with . . . modifications . . . performed only by computation.” (*see* p. 30, lines 21-25).

The magnification converter 20 of Mitsuka increases and/or trims the number of picture elements in *both* in the *main scan direction* and the subscan direction (*see* col. 5, lines 36-40), rather than “shifting writing timing in said main scan direction by changing a cycle of a writing clock,” as recited in claims 1, 11, and 18. Fujita merely teaches alignment of the starting positions of writing in a main scanning direction by detecting a marking 30M on the drum 30 (*see* col. 23, lines 13-24), and does not disclose “shifting writing timing in said main scan direction by changing a cycle of a writing clock.” The cited Mitsuka and Fujita references, either independently or in combination with each other, do not teach, suggest, nor would motivate an artisan to modify their teachings to obtain the claimed invention. Therefore, the proposed references are unable to sustain a *prima facie* case of obviousness.

Furthermore, claims 1, 11, and 18 recite a “printing plate” held by a “holding drum.” Neither of the references discloses a mechanism for performing printing with a printing plate as taught by the present application. Mitsuka merely teaches “a photosensitive material (26) on a rotational drum (25)” (col. 6, lines 2-3). Fujita teaches producing a color proof on a “photosensitive material P,” which comprises C, M, and Y layers that form respective colors (*see* col. 1, line 35 to col. 2, line 12 (discussing color proof); col. 23, line 33 to col. 24, line 12 (discussing photosensitive material)). Neither disclosure of a “photosensitive material” teaches, suggests, or would motivate an artisan to modify the cited prior art to obtain the claimed “printing plate” held by a “holding drum.” Therefore, the proposed references are unable to sustain a *prima facie* case of obviousness.

B. Independent Claim 28

In section 12 of the Office Action, claims 28-29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 4,686,580 (hereinafter “Kato”) in view of U.S. Pat. No.

5,001,575 (hereinafter “Nakahara”). In response, claim 29 has been canceled, and claim 28 has been amended to incorporate the limitations previously recited by claim 29 and further recite “said pixel group being not divided at regular intervals” (see p. 32, line 10 of the present application). Applicant respectfully requests reconsideration of the rejection.

Claim 28 recites a “pixel group being not divided at regular intervals . . . wherein the number of pixels in each of said plurality of modification unit pixel groups is half to twice a value obtained by dividing the number of pixels in said pixel group by the number of pixels to be added or deleted.” On page 12, the Office Action alleges that Kato teaches the latter portion of this limitation in col. 10, lines 17-55. Two specific items in this portion of Kato appear relevant to the claimed limitation. First, col. 10, lines 19-20 discusses “a magnification . . . A ($2 \geq A \geq \frac{1}{2}$).” This simply teaches a *magnification range* of the original image that is half to twice the original size, but is not descriptive of the range of the number of pixels present in each of the modification unit pixel groups, as recited in the claim. Second, col. 10, lines 36-49 discusses “the number of pixels m_1 in each of the n divisional images,” where n is the number of pixels added or deleted from the pixel group. In this portion, the pixel group is divided into divisional images which are either: (1) equally sized (equation 10), or (2) substantially equal in size where the value k/n does not yield an even integer (equations 11 and 12, using groups of m_1 and $(m_1 + 1)$ pixels respectively). This teaching of equally sized or substantially equally sized divisional images does not teach or suggest the recited “pixel group being not divided at regular intervals . . . wherein the number of pixels in each of said plurality of modification unit pixel groups is half to twice a value obtained by dividing the number of pixels in said pixel group by the number of pixels to be added or deleted.”

Nakahara discloses an apparatus for reproducing an original image with a different size where interpolation tables, which are used for adding a pixel, are prepared (col. 6, line 57 to col. 7, line 10) and a reproduced image is recorded with selecting an interpolation table on the basis of a random number (col. 8, lines 13-18). This also does not teach or suggest the recited “pixel group being not divided at regular intervals . . . wherein the number of pixels in each of said plurality of modification unit pixel groups is half to twice a value obtained by dividing the number of pixels in said pixel group by the number of pixels to be added or deleted.” Thus, the references, individually or in combination, do not teach, suggest, or would motivate an artisan to modify the cited prior art to obtain the claimed invention. Therefore, the proposed references are unable to sustain a *prima facie* case of obviousness.

C. Independent Claim 30

In section 13 of the Office Action, claim 30 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kato in view of U.S. Pat. No. 6,018,618 (hereinafter “Yoshida”). Applicant respectfully traverses this rejection.

In describing the teachings of the Kato reference, the rejection addresses the claim limitations only insofar as they recite “modifying width of an image in a predetermined direction” and “deleting or adding pixels.” However, the latter limitation is more fully and accurately recited as “deleting or adding pixels *while aligning pixels of an image*.” The rejection states that “Kato et al. fails to teach inserting a blank” (p. 12), and introduces Yoshida in an attempt to cure this shortcoming. However, this analysis does not address the need to “[align the] pixels of an image,” as recited by claim 30. Yoshida discloses a technique to append blank spaces to an image to be recorded in the case that the image does not have a predetermined standard size length (*see* col. 1, line 66 to col. 2, line 7). This use of blank spaces to merely “pad

out” an image which has already been recorded to paper is not accurately described as “alignment,” and does not teach or suggest the more complex procedure of “aligning pixels of an image,” such as the alignment depicted in Figs. 5A, 10, 14, and 15 of the present application. The references, either individually or in combination, do not teach, suggest, or would motivate an artisan to modify the cited prior art to obtain the claimed invention. Therefore, the proposed references are unable to sustain a *prima facie* case of obviousness.

D. Remaining Claims

In section 7 of the Office Action, claims 2, 14, and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mitsuka in view of Fujita and Kato. In section 8 of the Office Action, claims 3-4 and 20-21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mitsuka in view of Fujita and Nakahara. In section 9 of the Office Action, claims 2, 5, 19, and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mitsuka in view of Fujita and U.S. Pat. No. 6,290,327 (hereinafter “Hosokawa”). In section 10 of the Office Action, claims 6-7 and 23-25 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mitsuka in view of Fujita and Hosokawa and U.S. Pub. No. 2003/0136286 (hereinafter “Hideshima”). In section 11 of the Office Action, claims 8 and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mitsuka and Fujita and Yoshida. Applicant respectfully traverses the rejections of these claims.

Each of the above cited claims is dependent upon one of claims 1, 11, or 18, and is patentably distinct for at least the same reasons discussed for the parent claims in section I-A of this response. Nothing disclosed in the additional references Kato, Nakahara, Hosokawa, Hideshima, or Yoshida teaches, suggests, or would motivate an artisan to modify the teachings of Mitsuka in view of Fujita to produce the claimed material.

Furthermore, claims 5 and 22 recite “data . . . substantially indicating distortion of said original image in said modified image.” The Mitsuka, Fujita, Hosokawa, and Hideshima references, either individually or in combination, do not teach, suggest, or would motivate an artisan to modify the cited prior art to obtain the claimed material. Therefore, the proposed references are unable to sustain a *prima facie* case of obviousness with respect to claims 5-7 or 22-24, which include the above-mentioned limitation.

Additionally, claims 9, 16, and 26, recite “data of said modified image and data of shifting of writing timing in said main scan direction [are obtained], on the basis of a printing result of a test pattern.” The Mitsuka, Fujita, and Schaefer references, either individually or in combination, do not teach, suggest, or would motivate an artisan to modify the cited prior art to obtain the claimed material. Therefore, the proposed references are unable to sustain a *prima facie* case of obviousness with respect to claims 9-10, 16-17, or 26-27, which include the above-mentioned limitation.

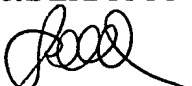
For the above reasons, Applicants believe that the application is in condition for allowance. The Applicants respectfully request the Examiner’s favorable consideration as to allowance. The Examiner is invited to contact the Applicant’s representative listed below.

Application No.: 10/791,906

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP



Stephen A. Becker
Registration No. 26,527

600 13th Street, N.W.
Washington, DC 20005-3096
Phone: 202.756.8000 SAB:EMS
Facsimile: 202.756.8087
Date: September 8, 2006

**Please recognize our Customer No. 20277
as our correspondence address.**